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# NASA Procedural Requirements

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## Subject: Real Estate Management Program Implementation Manual

**Responsible Office: Facilities Engineering and Real Property Division**

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### 3.1. Introduction

3.1.1. The NASA Facilities Utilization Program (FUP) described in this chapter provides guidelines, procedures, and definitions for the review and reporting of the utilization of NASA facilities. The FUP is intended to ensure, to the extent practicable, that all facilities are put to their highest and best use, consistent with NASA programmatic and institutional priorities. The FUP should provide a timely reference point from which corrective actions may be taken, e.g., consolidation, elimination of duplication, improved utilization, or disposal.

3.1.2. Center Directors should designate an official responsible for coordinating the assignment of building spaces, and implementation of both the facilities utilization reviews and the annual report preparation. The individual designated shall be known as the "Facilities Utilization Officer" (FUO), although the titles used in the implementation of the Facilities Utilization Program may vary among Centers.

3.1.3. The FUP is designed to provide a uniform and orderly process for meeting and addressing the following objectives:

3.1.3.1. The establishment of sound facilities requirements to meet NASA's strategic and core capability needs.

3.1.3.2. The optimum allocation of available facilities and related resources to meet NASA's programmatic and institutional requirements.

3.1.3.3. The early identification of NASA facilities that may be or may become underutilized or excess to NASA needs.

3.1.3.4. The early identification and request for required additional facilities resources.

### 3.2. Guidelines for Annual Reviews and Reports (See appendix A for instructions and samples of the referenced forms)

3.2.1. The periodic comprehensive utilization reviews will include all Real Property under the cognizance of the installation conducting the reviews. Because of the importance of Real Property, special emphasis will be placed on the utilization review of building spaces, and major facilities utilization. The following special provisions will apply:

3.2.1.1. Buildings Space Utilization Report (NASA Form 1400) will include all NASA building spaces, leased space, and space occupied under permit or agreements with other Government agencies.

3.2.1.2. Major Facilities Utilization Report (NASA Form 1400A) will include only those technical and institutional facilities designated in accordance with paragraph 4.2.3 "Major Facilities." This report will provide a quantitative assessment of the level of use for the past year's reporting period. In addition, it will include a projected level of use for the current year's reporting period. The procedures to be followed in preparing these reports are described in the general instructions for the preparation of NASA Forms 1400A and 1400B. The purpose of this report is to show, in some reasonable measure, that such Real Property is, or will be, utilized regularly for current programs or projects of NASA. Alternatively, the report may indicate that such Real Property is either not needed or is underutilized in

accordance with the annual review and reporting requirements of FPMR Subpart 101-47.8, "Identification of Unneeded Federal Real Property."

3.2.1.3. After preparing the NASA Forms 1400, 1400A, and 1400C, a utilization review will be made of the remaining Real Property inventory (land and minor facilities without building space). This report should include a written record of the review to be done in accordance with the guidelines specified in FPMR Subpart 101-47.8.

3.2.1.4. Any facility identified as unneeded or underutilized, as a result of the utilization reviews, will be reported on NASA Form 1400B, to the Director, Facilities Engineering and Real Property Division, NASA Headquarters, for consideration of possible use in other programs or for disposal authorization.

3.2.1.5. The data in NASA Form 1400, Form 1400A, Form 1400B, and Form 1400C reports should be as of the end of each fiscal year, i.e. September 30. Reports are due to the Director, Facilities Engineering and Real Property Division, Office of Institutional and Corporate Management, NASA Headquarters, by the succeeding December 30 of each year.

3.2.1.6. The letter transmitting the reports to NASA Headquarters should include the following: (1) A copy of the review record conducted in accordance with paragraph 4.3.1.3, along with a certification by the Center Director or Deputy, indicating that all NASA-controlled Real Property under the Center's cognizance, including that property that is owned, leased, and held under permit or other use agreement, has been reviewed. (2) Advice as to the action(s) to be taken on any property determined to be excess or underutilized should be included.

3.2.2. Automation of Facility Utilization reporting based on the NASA Form 1400 series is currently underway and is expected to enhance the reporting process described above. No fundamental changes in existing policy or reportable data have been made. A future requirement to break out building utilization by Strategic Enterprise rather than Center organization is contemplated to accommodate full-cost accounting processes. However, the submission of reports will, in general, be supplanted by a requirement to keep an on-line data base updated with periodic certification of accuracy by FUO's and by Center Management at the end of each fiscal year. Transition to the automated FUP data system and full cost accounting will be covered by policy letters and subsequent updates to this NPR.

### 3.3. Definitions of Terms Used in the NASA FUP

3.3.1. Facilities. For the purpose of the FUP, is defined as land, buildings, structures, utilities systems and improvements, and appurtenances thereto, permanently affixed to land. The term "facilities" is synonymous with "Real Property," which is further defined in NPD 8800.14. Because "Real Property" as a term is associated more with accountability than usability, the term "facilities" is used in this chapter since it is more in keeping with the context of the FUP.

3.3.2. Buildings Space. The enclosed net usable area of a building, excluding custodial, circulation, mechanical, and construction areas.

3.3.3. Major Facilities. Large, complex technical and otherwise special institutions facilities that are representative of the Center's basic and essential capabilities. The identification process and reporting requirements are further described in paragraph 3.8.

3.3.4. Rooms. Interior spaces enclosed by walls and/or partitions and separate from other similar spaces by walls or partitions.

3.3.5. Offices. Rooms in which desk-type science, management, engineering, administration, design, or business activities are conducted; generally, single-story rooms characterized by desks, tables, chairs, files, bookcases, and small, generally portable office, scientific, or test equipment. This includes circulation space integral with secretarial offices.

3.3.6. Laboratories. Rooms in which electronic, chemistry, life science, medical, bioscience, physics, photographic, or other research, development, evaluation, or test activities are conducted. Laboratories are generally single-story rooms characterized by special utilities and built-in or portable instruments and equipment. Laboratory space may also include small office areas (desk space) incidental to the main laboratory activity.

3.3.7. Technical Space. Rooms in which assembly, instrumentation, test, checkout, launch, control, data reduction, computer, calibration, or similar activities are conducted. Technical space is characterized by large, installed and often sophisticated equipment and frequently by multistory or high bay features. Technical space may also include small, incidental office areas.

3.3.8. Conference Space. Rooms in which periodic or temporary seating or assembly of people is scheduled; includes class, lecture or training rooms, auditoriums, or similar activities. Conference space is characterized by the basic ability to seat personnel, coupled with the required training aids, media, or devices. Conference space integral with supervisory offices will be reported as office space.

3.3.9. Shop-Industrial. Rooms in which carpentry, electrical, plumbing, electronic, welding, metal working, or other

trades are conducted. This includes maintenance, fabrication, manufacturing, or repair activities. Shop-industrial space is characterized by conventional machines and equipment peculiar to the shop or industrial environment. Shop-industrial space may also include small, incidental office areas.

3.3.10. Storage Space. Rooms in which files, film, tapes, supplies, or equipment not in use are stored; includes stock, warehousing, shipping, and receiving activities.

3.3.11. Miscellaneous Space. Areas in which activities, other than those previously classified, are conducted; includes visitor information, reception, libraries, banks, cafeterias, concessions, security, fire protection, post office, and similar activities.

### 3.3.12. Net Usable Area

3.3.12.1. The net usable area will be construed to mean the sum of all areas on all floors of a building comprising every type of space functionally usable by and assignable to, an occupant. In addition to space that obviously falls within this category, net usable area also includes auditoriums, computer rooms, cafeterias, concessions, conference rooms (joint use), credit union offices, garages, health units and first aid rooms, kitchens, loading platforms, telephone operator areas and telegraph operator rooms.

3.3.12.2. The areas excluded from the net usable areas consist of custodial, circulation, mechanical, and construction areas as further defined in paragraph 3.3.14.

3.3.12.3. The net usable area will be computed by measuring from face to face of the walls or partitions enclosing the area. When walls or partitions do not enclose areas of various use, measurements will be taken to an imaginary line that separates the areas.

3.3.12.4. No adjustments shall be made for minor projections or alcoves that would distort the net usable area of the building.

### 3.3.13. Gross Area

3.3.13.1. Gross area is the sum of the floor areas included within the outside faces of exterior walls for all stories, or areas, that have floor surfaces. Although gross areas are not in the FUP, the following bases for measurement are established in the event this type of information is required to support special project needs or to more easily determine net usable areas.

3.3.13.2. Gross area will be computed by measuring from face-to-face of the outside surface of exterior walls, disregarding cornices, pilasters, and buttresses that extend beyond the wall face.

3.3.13.3. Gross areas will include basements (except unexcavated portions), floored attics, garages, enclosed porches, penthouses and mechanical equipment floors, lobbies, mezzanines, all balconies (inside or outside) utilized for operational functions, and main/common corridors, provided they are within the outside face lines of the building. Roofed loading or shipping platforms will be included whether within or outside the exterior face lines of the building.

3.3.13.4. Open courts and light wells, or portions of upper floors eliminated by rooms or lobbies, that rise above single floor ceiling height, will not be included in the gross area, nor will unenclosed roofed over areas or floored surfaces with less than 6 feet 6 inches clear headroom be included unless they can be designated properly and used as either net usable, mechanical, circulation, or custodial areas.

### 3.3.14. Gross Area Classifications

#### 3.3.14.1. Custodial Areas

a. Custodial area will be construed to mean the sum of all areas on all floors of a building used for building protection, care, maintenance, and operation.

b. Custodial areas will be computed by measuring from face to face of enclosing walls.

c. Custodial areas will include such areas as janitors' locker rooms, closets and storerooms, and building maintenance and operating engineer control areas.

#### 3.3.14.2. Circulation Areas

a. Circulation areas will be construed to mean that portion of the gross area whether or not enclosed by partitions that is required for physical access to some subdivision of space.

b. Circulation areas will be computed by measuring from the inner faces of the walls or partitions that enclose horizontal spaces used for such purpose. When walls or partitions do not enclose such spaces, measurement will be taken from imaginary lines that conform as nearly as possible to the established circulation pattern of the building.

c. Circulation areas will include, but not be limited to, corridors (access, public, service, also "phantom" for large unpartitioned areas), elevator shafts, escalators, fire towers or stairs, stair wells (area at each floor level) and stair

halls, loading platforms (except when required for operational reasons and, thus, included in net usable area), lobbies (elevator, entrance, public, also public vestibules), and tunnels and bridges (not mechanical).

d. When identifying corridor areas, only horizontal spaces required for general access will be included, not aisles that are normally used for circulation within offices or other working areas. No adjustment shall be made for minor projections or alcoves that would distort the actual net usable area of the building.

### 3.3.14.3. Mechanical Areas

a. Mechanical areas will be construed to mean that portion of the gross areas designed to house mechanical equipment, utility services, and nonprivate toilet facilities.

b. Mechanical areas will be computed by measuring from face-to-face of the walls, partitions, or screens enclosing the area.

c. Mechanical areas will include, but not be limited to, air-duct shafts, boiler rooms, fixed mechanical and electrical equipment rooms, fuel rooms, mechanical service shafts, meter and communications closets, service chutes, stacks, and nonprivate toilet rooms (custodial and public). No adjustment shall be made for minor projections or alcoves, which would distort the net usable area of the building.

### 3.3.14.4. Construction Areas

a. Construction areas will be construed to mean that portion of the gross area that cannot be put to use because of the presence of structural features of the building.

b. Precise computation of construction areas is not contemplated under these definitions— some construction features are included in the computation of other areas. However, total construction area will generally be determined by assuming it to be the residual area after the net usable, circulation, custodial, and mechanical areas have been subtracted from the gross area.

c. Examples of areas normally classified as construction areas are exterior walls, fire walls, partitions, and unusable areas in attics, basements, or comparable portions of the building.

## 3.4. Building Quality Code

3.4.1. Building Quality Code is used for improved comparative analysis of space utilization problems, the quality of all space in a center's inventory must be rated. The following criteria are to be employed to distinguish office space of standard quality from that space which is considered to be of lower quality.

3.4.1.1. The ratings are to be made on a three-level scale as follows:

a. S (Standard) is the rating given to those spaces that provide adequate environments for the assigned functions. There is little need for improvement to this space for the functions being carried out and it successfully meets all rating factors outlined in 3.4.2.

b. M (Marginal) is the rating given to those spaces that are not ideally suited to the assigned function. Although the environment in these areas is considered to be less desirable than that in the S classified spaces, functions can continue to be housed there. Such space would fail to meet only one rating factor.

c. X (Substandard) is the rating given to those spaces that do not provide a suitable environment for the assigned function. These areas should be considered for modification, upgrading, or replacement at some time in the future if the planning and financial atmosphere is conducive. Such space would fail to meet two or more rating factors.

3.4.2. The assignment of ratings based on the quality of space provides, at best, a subjective review of the level of the environmental adequacy of building areas in relation to the functions assigned to them. In order to introduce the highest level of validity and reliability to the evaluation of the space, the following series of factors are to be uniformly considered when rating the quality and condition of the space. These factors include the following:

3.4.2.1. Illumination levels, sufficiently high, but with low glare and dispersed to allow for visual comfort.

3.4.2.2. Noise level, both externally and internally produced, within tolerable limits.

3.4.2.3. Temperature and humidity level controlled within normal comfort ranges.

3.4.2.4. Ventilation and air circulation within a space sufficient to eliminate thermal pockets that are not so great as to create uncomfortable draft conditions.

3.4.2.5. Odor levels, either externally or internally produced, within tolerable limits.

3.4.2.6. Vibration level, induced by operating equipment or other sources, sufficiently low as not to intrude on personnel effectiveness.

3.4.2.7. Cleanliness level, both for normal environments and special environments, within acceptable limits.

3.4.2.8. Size and configuration of the space sufficient for space function.

3.4.2.9. Ceiling heights, both for operating equipment and furnishings, as well as for personal comfort at sufficient heights.

3.4.2.10. Occupational safety characteristics that reduce hazards of fire, toxic emission, or other conditions like hazards within required ranges.

3.4.2.11. Building space is onsite and owned by or on permit to NASA as differing from off-site leased space with distance and adjacency detriments.

3.4.3. Well maintained permanent and semipermanent onsite building space would normally fall within the standard category. Offsite leased space and older or unsuitably used space would fall into the marginal category. Trailers and portable buildings as well as obsolete permanent facilities would always be considered substandard space.

## 3.5. Standard Space Allowance for Office Space

3.5.1. For general office space planning and review purposes, a Centerwide average office density of 110 net square feet per person (nsf/person) is considered to be the optimum office density and assumes the midpoint between an austere density limit of 95 nsf/person and a satisfactory liberal limit of 125 nsf/person.

3.5.2. An average density factor outside the range of 95 nsf/person to 125 nsf/person, however, may be, at times, reasonable. Such factors as the grade structure of the personnel housed and consideration of special office equipment and internal circulation space needs can often support such variances. In addition, ceaseless efforts to conform to rigid density standards can result in continuous and costly adjustments to space allocation.

3.5.3. For additional guidance, Centers should refer to FPMR 101.17.3 for determining space requirements for personnel/organizations. The space allowance standards set forth therein, however, should not be rigidly used for space assignment to individuals or sub-units, as the position space needs of equal grades can vary as affected by functional factors, such as supervisory positions vs. nonsupervisory, or receptionist vs. secretary.

## 3.6. Basic Density of Office Personnel

3.6.1. It is recognized that the Center's average office density is usually inflated by circulation, reception, special equipment and file space in secretarial office, drafting, and similar areas. If it is necessary to determine the basic density of personnel in office space, such as to relate to the space allowance standards set forth in FPMR Subpart 101.17.3, "Space Standards, Criteria, and Guidelines," then collateral office space must be calculated and then excluded from the density calculation. This collateral office space can be determined by random sample analysis of typical office arrangements. Generally, excluding collateral office space would reduce the average office density by about 10 percent. Other than the allowance for collateral office space for circulation, all space used for offices must be reported as office space and used in the density calculation.

## 3.7. Space Allowance Standards for Systems Furniture

3.7.1. When using space-efficient systems furniture in open office areas, higher densities must be achieved to justify the acquisition of this higher quality furniture. For general planning purposes, the following standards will be utilized to achieve the optimum systems furniture overall density of 95 square foot/work station. Excluded from this factor are special purpose office support areas, personnel above GS-15 and contractor equivalents, and common/main corridors.

	<b><u>Avg.</u> <u>SF/Workstation</u></b>	<b>X</b>	<b><u>Circulation</u> <u>Factor</u></b>	<b>=</b>	<b><u>Total</u> <u>Allowance</u></b>
General Staff <sup>1</sup> (Engineers, Analysts, Technicians, Clerical)	70	X	1.25	=	88 SF
Supervisors, Senior Staff, GS-13/14	110	X	1.2	=	132 SF
Secretaries to Supervisors	90	X	1.2	=	108 SF
Managers/GS-15	150	X	1.1	=	165 SF



Secretaries to Managers (With Reception Seating)	120	X	1.1	=	132 SF
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- 1 Min 50 SF, Max 80 SF with minimum circulation lane widths of 36" single loaded, 44"

### 3.8. Major Facilities Designation and Reporting Utilization

3.8.1. Designation of Major Facilities. There are varying parameters by which a facility may be evaluated as being a major technical or institutional facility. Uniqueness, book dollar value, physical size, staffing, operations and maintenance costs, and importance to a specific program, are factors that should be considered in developing a list of such facilities. The sensitive relationship of these and other factors can best be assessed initially by the Center. Accordingly, using the Center's facilities master plan as source documents, the Center will prepare an initial draft list of such facilities that will be coordinated with the Director, Facilities Engineering and Real Property Division, NASA Headquarters, who, in further coordination with concerned Headquarters Offices, may request additions or deletions. If such modifications are satisfactory to the Center's viewpoint, the list would be formalized by the concurrence of the Center Director, and the utilization of these designated facilities would then be reported to Headquarters on an annual basis. When made necessary by facility additions, modifications, disposals, and changes in use, this list should be revised from time to time by repeating the above procedure. The list will be verified every 3 years. To reduce subjective judgment in decisions to include or exclude specific facilities, the following guidelines are provided. NASA Centers, which exclude any facility meeting two or more of the guidelines for major facility reporting, should document the rationale for such exclusions. It is emphasized that these are guidelines and not rigid parameters. The primary emphasis in this evaluation of facilities is to designate those facilities, which are representative of NASA's basic and essential facility capability. Accordingly, include those facilities that represent such capability and meet two or more of the following criteria:

- 3.8.1.1. Technical facilities that are unique in capability within the agency inventory, e.g., the 80 x 120 foot Wind Tunnel at the Ames Research Center. Any such facility should provide primary support to the Center's assigned programs to such an extent that the Center could not reasonably accomplish its mission, or major segment thereof, without this facility capability.
- 3.8.1.2. Facilities exceeding \$8,000,000 in book value or \$30,000,000 in replacement value.
- 3.8.1.3. Facilities with operations and maintenance cost exceeding \$600,000 per year.
- 3.8.1.4. Facilities that house or require a dedicated support staff of over 200 personnel other than office buildings.
- 3.8.1.5. Facilities, whether unique or not, that are dedicated to a major program; e.g., the Orbiter Processing Facility at the Kennedy Space Center.

3.8.2. Baseline Utilization of Major Facilities. Determination of a specific facility's baseline will be based on that level of use and/or cost effectiveness, stated in compatible technical terms, that could reasonably justify acquisition and retention of the facility. The level of use may be given as a rate, such as hours per month or year; in usable capacity, such as rated population at 300 nsf per/person or occupied net usable cubic feet per year; or in activity, such as Equivalent Utilization Days (EUD), or tests or launches per year as outlined more specifically under Paragraph 3.8.4., Utilization Criteria for Major Facilities.

3.8.3. Threshold of Underutilization for Major facilities. When a facility's level of use (percentage of baseline) falls below 50 percent for the past year's reporting period, or is predicted to fall below 50 percent for the current year's reporting period (excluding the impact of any modification/rehabilitation or similar activity) the facility is to be considered as underutilized and reported as such.

3.8.4. Utilization Criteria for Major Facilities. The units of measure provided for the facility types listed in the Utilization Table (shown on the next page) are to be used in establishing a reasonable baseline utilization factor and in assessing the facility activity during the reporting period. The units should be uniformly applied but can be adjusted for special facility uses in cases where the recommended unit of measure does not seem fully appropriate. It is recognized that these units of measure, in many cases, are not based on a precise methodology; however, every reasonable effort should be made to represent the level of use, of the facilities correctly. In cases where the unit of measure does not seem appropriate, it is recommended that the FEO coordinate the proposed unit of measure with the Director, Facilities Engineering and Real Property Division.

3.8.5. Periodic Use Facilities. For most of the facility types outlined in paragraph 3.8.4, the facilities would be used on a continuous basis, and their level of use can be readily indicated. However, some of these facilities fall into "a periodic use" category, such as launch facilities and engine test stands. Additional analysis says that occasionally it may be necessary for such periodic use facilities to demonstrate, in some reasonable manner, that their retention at

the current level of readiness is cost effective and/or warranted. Such analyses should be retained at the installation and submitted to the Director, Facilities Engineering and Real Property Division, NASA Headquarters, only when requested.

3.8.5.1. Nationally Unique Facilities. Additionally, it is recognized that periodic use facilities may often have comparatively low use rates, such as one launch per year. However, for retention of those facilities, that are nationally unique in capability and are needed to accomplish approved unique requirements, it is necessary to demonstrate that the facility will be used for this unique national purpose, as required. Therefore, if there is no competing higher use or utilization alternative, the unique facility should not be reported as underutilized because it is accomplishing 100 percent of the Nation's total requirement for such capability. Notation that the facility is nationally unique and is used for unique requirements should be made in the Remarks column.

3.8.6. Facilities Utilization Determined by Observation. The level of use or need for certain laboratories can be readily determined by observation (visual inspection by the FVO). Such laboratories include, for example, electronic, chemical, physics, biological, physiology, and material analysis, which have multiple types of equipment. The individual uses of this equipment may vary according to task objective, but all such equipment is necessary to qualify the particular laboratory for its assigned missions. In these cases the utilization of the laboratory space housing this needed equipment is 100 percent. The use of such visual assessments eliminates the need for costly log/recordkeeping in the interest of program cost effectiveness.

3.8.7. Facilities Limited in Use by Other Factors. Where facilities are limited to lower use rates by the constraints of weather conditions, environmental compliance action, or construction activity, notation should be made to this effect in the Remarks column.

## 3.9. Facility Activity Policy

3.9.1. Active facility. Any facility that has a specific and present, or near term, program or institutional requirement. Space utilization would normally be at least 50 percent and/or the usage level exceed 50 percent of the available time for use.

3.9.2. Inactive facility. Any facility that has no specific and present, or near-term, program or institutional requirement. The inactive facility may be placed in a "Standby," "Mothballed," or "Abandoned" status. The following generally applies to all levels of inactive facilities:

3.9.2.1. No personnel occupy the facility.

3.9.2.2. Utilities are curtailed, other than as required for fire, security, or safety.

3.9.2.3. Facility is secured to prevent unauthorized access and injury to personnel.

3.9.2.4. Facility does not receive funding for renewal, or other significant improvement.

3.9.2.5. The Current Replacement Value (CRV) of inactive facilities should be removed from the Center's total.

3.9.3. Standby. A facility that is temporarily not in use and appropriate maintenance measures have been taken to maintain its vital or essential operating systems in a state of readiness or availability for future use. Selective life cycle cost effective facilities maintenance and repair is required. Total time to deactivate and then to reactivate the facility, including the standby period, is expected to be less than 12 months.

3.9.3.1. Utility systems and collateral equipment have been secured as may be appropriate and equipment is cycled in operation on a planned basis to prevent deterioration.

3.9.3.2. Facility interior has appropriate environmental control to prevent deterioration.

3.9.4. Mothballed. A condition where a facility has been deactivated and appropriate maintenance measures have been taken to prevent deterioration of its vital or essential systems or placed in protective storage. Higher first year costs would be expected because of preparations for mothballing, but future annual costs should be significantly lower due to reduced maintenance and repair requirements. Total time to deactivate and then to reactivate the facility, including the mothballed period, is expected to exceed 12 months.

3.9.4.1. Utility systems and collateral equipment have been shut down and properly prepared for long term inactivation without significant deterioration. Selected systems should be kept in operation and inspected, such as cathodic protection systems.

3.9.4.2. Facility interior has appropriate environmental control to prevent significant deterioration.

3.9.4.3. The facility exterior envelope is inspected on a planned basis and work is accomplished as required to maintain the integrity of the exterior shell from the elements. The exterior of the facility shall also be kept in an aesthetically acceptable condition.

3.9.5. Abandoned. There are no plans for future reactivation. A condition in which a facility has been "walked away from" or ceasing to maintain any part of the property. Facility systems and collateral equipment should be

considered for excess and/or identified for use at other NASA locations where feasible and cost-effective.

3.9.5.1. All utilities have been secured and disconnected at the first service equipment location outside the facility.

3.9.5.2. Facility has been secured to prevent the pilfering of economically salvageable materials.

3.9.5.3. Until the facility is demolished, it may be necessary to maintain the exterior of the facility in a minimally aesthetically acceptable condition.

3.9.5.4. In coordination with the Center Environmental Office, environmental surveys have been completed and any remediation required has been identified and programmed.

3.9.5.5. All personal property and controlled equipment have been removed and accounted for.

3.9.5.6. Plans have been made to demolish or declare the facility excess at the earliest practical date.

3.9.6. Funding. Inactivation or reactivation costs of a technical or support facility should be funded from program appropriation. Multiprogram technical or support facilities should be funded by a multiprogram type account that is consistent with Agency funding policies. Other facilities should be funded from overhead type funds.

3.9.6.1. Environmental surveys and any required remediation (other than Construction of Facilities work) should be funded as outlined in inactivation/reactivation above.

3.9.6.2. Facility fire, security, safety, and required interim facilities maintenance and repair that is required until final disposition action on the facility (reactivation or disposal) should be funded in the same manner as outlined in inactivation/reactivation above, with the exception that technical and technical support facilities should be funded by a multiprogram type account.

3.9.7. Approval. The decision to declare a facility inactive should be approached in a cost effective manner while considering the significant cost required to prepare a facility for some types of inactivation such as mothballing, and the additional costs later for reactivation. Abandonment could also require significant expenditures to identify and correct any past environmental damage.

3.9.7.1. The Real Property Accountable Officer, in consonance with the Facility Utility Officer, shall ensure that all determinations of facilities that will be converted to inactive status, and the reactivation of any facilities, are certified by the Center Director or Deputy. A copy of this determination shall also be provided to the Director, Facilities Engineering and Real Property Division, Office of Institutional and Corporate Management, NASA Headquarters.

3.9.7.2. Actions required on approval of facility inactivation are 1) The Center's Real Property records for the facilities affected, shall be noted as being inactive; 2) The Center's NASA Real Property Database program data files shall be updated to reflect the inactive facilities; and 3) The Center's master plan shall be updated.

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